

Amendments to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the above-identified application.

Listing of Claims

20. (original) A conjugate, comprising a heart homing peptide linked to a moiety, said heart homing peptide comprising an amino acid sequence selected from the group consisting of

GGGVFWQ (SEQ ID NO: 2);

HGRVRPH (SEQ ID NO: 3);

VVLVTSS (SEQ ID NO: 4);

CLHRGNSC (SEQ ID NO: 9); and

CRSWNKADNRSC (SEQ ID NO: 10), or a functionally equivalent modification thereof.

21. (original) The conjugate of claim 20, wherein said moiety is selected from the group consisting of a therapeutic agent, a detectable agent and a tag.

22. (original) The conjugate of claim 20, wherein said therapeutic agent is a vascular endothelial growth factor (VEGF).

23. (original) The conjugate of claim 20, wherein said therapeutic agent is a fibroblast growth factor (FGF).

24. (original) A method of treating a cardiovascular disease in a subject, comprising administering a conjugate comprising a heart homing peptide linked to a therapeutic agent, said peptide comprising an amino acid sequence selected from the group consisting of

GGGVFWQ (SEQ ID NO: 2);
HGRVRPH (SEQ ID NO: 3);
VVLVTSS (SEQ ID NO: 4);
CLHRGNSC (SEQ ID NO: 9); and
CRSWNKADNRSC (SEQ ID NO: 10), or a functionally equivalent modification thereof.

25. (original) The method of claim 24, wherein said cardiovascular disease is atherosclerosis.

26. (original) The method of claim 24, wherein said cardiovascular disease is restenosis.

Claims 27-30 – cancelled.

31. (withdrawn) A conjugate, comprising a peptide that selectively homes to ischemic tissue, said peptide linked to a moiety.

32. (presently amended) The A conjugate, comprising a peptide that selectively homes to ischemic tissue, said peptide linked to a moiety of claim 31, said peptide comprising an amino acid sequence selected from the group consisting of

GGGVFWQ (SEQ ID NO: 2);
HGRVRPH (SEQ ID NO: 3);
VVLVTSS (SEQ ID NO: 4);
CLHRGNSC (SEQ ID NO: 9); and

CRSWNKADNRSC (SEQ ID NO: 10), or a functionally equivalent peptidomimetic thereof.

33. (original) The conjugate of claim 32, wherein said moiety is selected from the group consisting of a therapeutic agent, a detectable agent and a tag.

34. (original) A method of treating ischemic disease in a subject, comprising administering a conjugate comprising an ischemic tissue selective peptide that selectively homes to ischemic tissue, said peptide linked to a moiety.

35. (original) The method of claim 24, wherein said cardiovascular disease comprises ischemia.

36. (withdrawn) A conjugate, comprising a heart homing peptide that selectively homes to cardiac tissue, comprising an amino acid sequence that has a length of less than 100 amino acids.